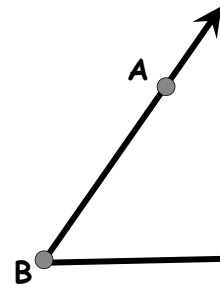


## 2.2

# POOLROOM MATH

## Measurement of Angles

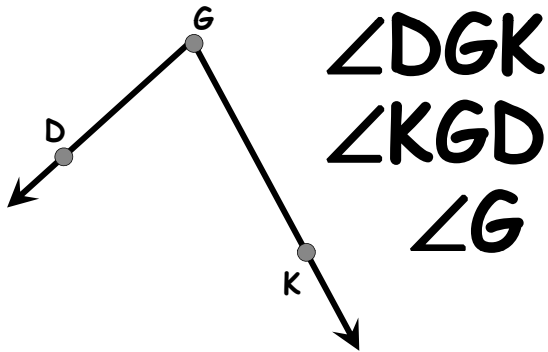


Angles are measured on how open they are.

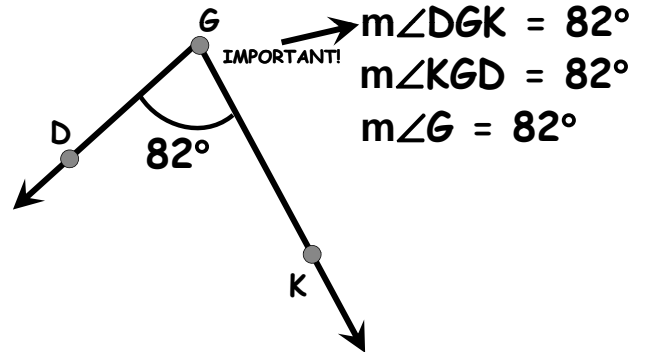
They're measure by DEGREES.

# 70°

## Naming an Angle



## Naming the measurement of an angle



## Terms to Know

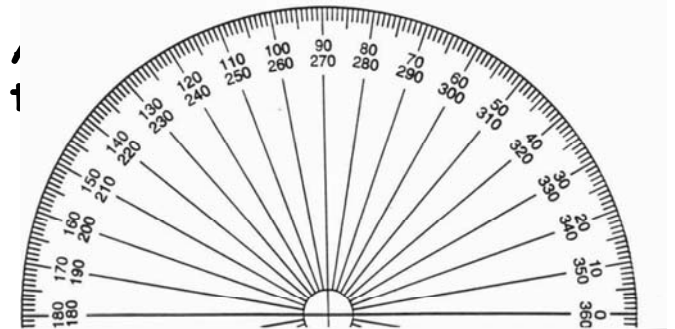
Full Turn  $\rightarrow 360^\circ$

Half Turn  $\rightarrow 180^\circ$

$\frac{1}{4}$  Turn  $\rightarrow 90^\circ$

$\frac{1}{8}$  Turn  $\rightarrow 45^\circ$

## Measuring Angles



# USING A PROTRACTOR TO DRAW AND MEASURE ANGLES

With your protractors, make the following angles:

- 1)  $40^\circ$
- 2)  $130^\circ$
- 3)  $95^\circ$
- 4)  $25^\circ$

## 2.3

# WHAT'S A WIDGET (DEFINITIONS)

## WRITING YOUR DEFINITIONS

- 1) Precise
- 2) Avoid ambiguous terms (some, about, small...)
- 3) Make sure can't make a counterexample of the definition

## SPECIAL WAY OF WRITING DEFINITIONS

If...then.... (CONDITIONAL)

Very good definitions can have the form of a BICONDITIONAL, a conditional that can be reversed and still is true.

## SPECIAL WAY OF WRITING DEFINITIONS

Example of a biconditional:

If a polygon is a hexagon,  
then it has 6 sides.

If a polygon has 6 sides,  
then it is a hexagon.

# INVESTIGATION

# PG 88

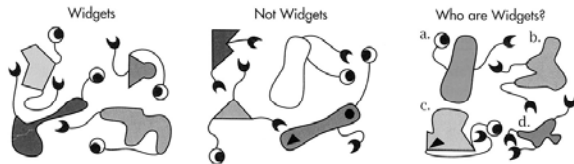
## Example B

Study the information, then identify which creatures in the last group are Orks.



## Investigation 2.3.1

1. Which creatures in the last group are Widgets? What makes a Widget a Widget?



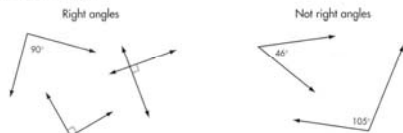
2. Which creatures in the last group are Zoids? What makes a Zoid a Zoid?



# CLASSWORK IN GROUPS

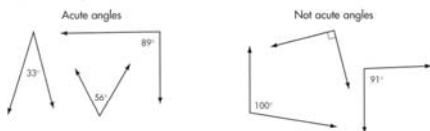
Investigation 2.3.2  
Pg 90-91 #1-5

1.\* Define *right angle*.

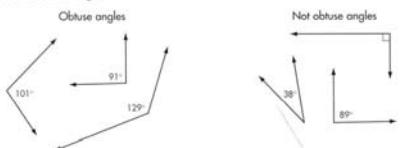


Note: A small square in the corner of an angle indicates that it measures 90°.

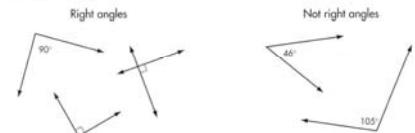
2.\* Define *acute angle*.



3. Define *obtuse angle*.

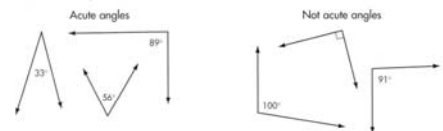


1.\* Define *right angle*.

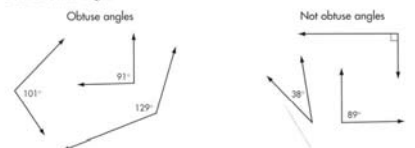


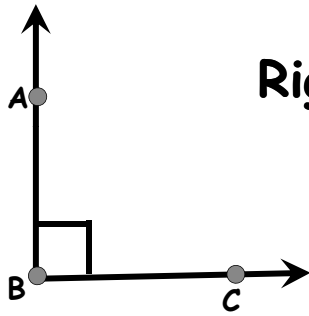
Note: A small square in the corner of an angle indicates that it measures 90°.

2.\* Define *acute angle*.

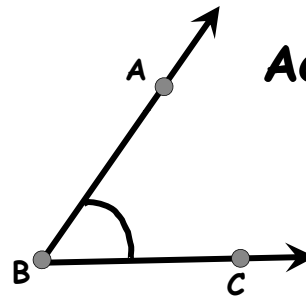


3. Define *obtuse angle*.

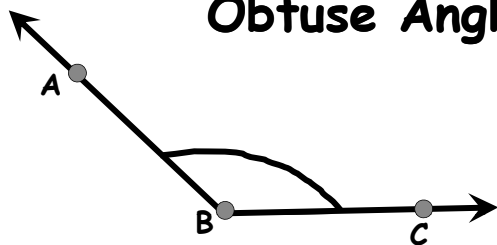




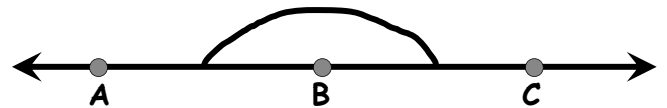
**Right Angle**



**Acute Angle**



**Obtuse Angle**

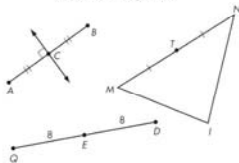


**Straight Angle**

An angle that's exactly  $180^\circ$

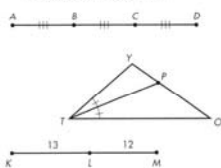
4. Define *midpoint of a segment*.

Midpoints of segments



Point C is a midpoint of segment AB.  
Point T is a midpoint of segment MN.  
Point E is a midpoint of segment QD.

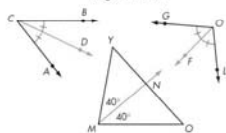
Not midpoints of segments



Points B and C are not midpoints of segment AD.  
Point P is not a midpoint of segment YO.  
Point L is not a midpoint of segment KM.

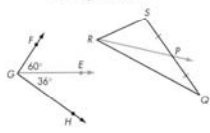
5. Define *angle bisector*.

Angle bisectors



Ray CD, ray OF, and ray MN are angle bisectors.

Not angle bisectors



Ray GE and ray RP are not angle bisectors.

**Midpoint of a segment**

**Angle Bisector**